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Via: Electronic Mail
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U.S. EPA Natural Gas STAR Program
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RE: Comments from Vectren Corporation on Proposed Natural Gas STAR Gold Program
Docket ID No: EPA-HQ-OW-2009-0819

Vectren Corporation (Vectren) hereby submits comments in response to the U. S. Environmental Protection Agency's (EPA) proposed Natural Gas STAR Gold Program as published on the EPA Gas STAR website (Gold Program).

Vectren is headquartered in Evansville, Indiana and through its natural gas utility subsidiaries Indiana Gas Company (IGC), Southern Indiana Gas and Electric Company (SIGECO), and Vectren Energy Delivery of Ohio (VEDO) is the owner operator of three natural gas distribution, transmission and storage systems that serve customers in Indiana and Ohio. More specifically, the IGC service territory covers 6741 square miles and provides natural gas to approximately 570,000 customers in central and southeast Indiana through 12,529 miles of distribution pipelines, 639 miles of transmission lines, 1343 regulator stations, and 4 natural gas storage fields. SIGECO gas operations covers 2570 square miles and serves 110,000 customers in southwest Indiana through 3095 miles of distribution lines, 148 miles of transmission lines, 620 regulator stations and 3 natural gas storage fields. VEDO provides natural gas to roughly 312,000 customers in west central Ohio with a gas territory that covers 2549 square miles through 5284 miles of distribution pipelines, 217 miles of transmission lines, and 2309 regulator stations. In addition to the three regulated utilities, Vectren also has an affiliated business unit which operate a natural gas storage field and transmission system compressor station.

Vectren appreciates the opportunity to provide comment on the proposed Gold Program. We feel direct involvement from those affected by the proposal is the best way to create a program

that not only meets EPA's stated goal of reducing methane emissions from the Oil and Gas energy sectors, but is also workable in real life operational situations. EPA has repeatedly encouraged comments on the Gold Program through its website and public webinars in April and June, yet the main document that explains the nuts and bolts of the program, the Appendix B – Technical Support Document, is still not publically available for review and comment. While we recognize the program has a very rigid timeframe that was set out in the President's Climate Action Plan, the failure to release key supporting information such as definitions and operational descriptions makes it nearly impossible to provide comprehensive comments. It is not in the best interest of EPA or the regulated community to create a voluntary program that is not operationally sound or impractical to implement in the field resulting in very few, if any companies signing up for the program.

General Program Comments:

EPA has identified nine industry segments and seventeen protocols that must be implemented in order to qualify for the Gold Program. Some protocols apply across the board to all industry segments while others only apply to a handful of segments. In order to achieve Gold status a company must meet the requirements of all stated protocols within an industry segment at a minimum of one facility, with the definition of "facility" being the same that is used in the Greenhouse Gas Reporting Program. Vectren is subject to the protocols assigned to Natural Gas Distribution (10 to 12 protocols), Onshore Natural Gas Transmission (13 protocols), and Onshore Natural Gas Storage (11 to 12 protocols) at our three unique facilities – IGC, SIGECO and VEDO. As described earlier, these three systems vary greatly in length of pipe and geographic coverage, and all are considered to be mid to large natural gas systems. We understand that EPA purposely developed "stretch" goals, but a one-size- fits- all approach is not practical.

In a document dated May 8, 2014 discussing the general program design, EPA states "Participating facilities would achieve Gas STAR Gold status by implementing a comprehensive suite of protocols for reducing methane emissions through readily available, cost-effective technologies and best management practices." Based on the definition of "facility", a gas system can range from a small municipal system serving a few hundred customers to a large system that covers thousands of miles of pipe and regulator stations. What may be considered

readily available and cost effective technology for a small system may not be equally accessible across a larger system. Regardless of the size of the system, the requirement to simultaneously implement and meet 10 to 13 protocols may be a barrier for many companies to consider the program. Fewer participants will enroll in the program based solely upon the inability to meet one or two of the required protocols.

As explained in the draft, the first step towards acceptance into the program is to submit a Letter of Intent followed by an implementation plan outlining the timeframe for implementing the protocols. It does not specifically state that all protocols must be in place within a year of submitting the Letter of Intent, but that is implied in the third step which is the annual verification report that allows EPA to evaluate and insure that all protocols are fully implemented.

> Vectren recommends a phased approach to encourage increased participation over time, instead of the all or nothing process currently described. A phased program might require implementation of 50% of the segment specific protocols in year one, 75% in year three, and 100% in year five. As long as the company continues to follow its stated implementation plan timeframe, Gold (or interim Gold) status recognition would still apply at the end of year one. A phased program would also allow a facility to better manage costs and regulatory commission approvals.

There is also uncertainty in how a diversified, multi-sector utility would apply for the program. For instance, SIGECO operates natural gas transmission, distribution and storage facilities. Are we able to sign up SIGECO transmission assets separately from SIGECO storage or distribution assets? Or must all three industry segments fully implement the protocols in their area in order for SIGECO to join the program? If the latter is the correct interpretation, it will put multi-sector utilities at a significant disadvantage over single sector facilities. It is understood that the program will allow multi-state facilities to register on a state by state basis so it would stand to reason that a multi-sector facility can register on a sector by sector basis.

> Vectren recommends enrollment in the Gold Program be established by facility and industry sector. Therefore "Facility A Distribution", could sign up without waiting to complete "Facility A Storage" protocols. This will encourage earlier entry in the program

for multi sector utilities who might otherwise be discouraged by the sheer number of protocols that must be implemented if it is on a total facility view.

EPA is inconsistent between the documents posted on its website for protocols, #7 and 13, so it is unclear which industry segments are targeted. For Protocol 7 (Flares), Natural Gas Distribution (D) is included in the original summary entitled "Proposed Gas STAR Gold Protocols" that first identified the segment / protocol matrix and the June 18th webinar slide deck, but not included in Appendix A. Protocol 13 (Pipeline Inspection and Repair) is even more inconsistent. The original summary matrix includes 6 segments, but not Distribution (D) and Onshore Natural Gas Storage (S); Appendix A identifies a different six segments that include Distribution (D) and Storage (S); and the webinar slide deck assigns Protocol 13 to eight of the nine segments on page 32 but six segments (which match Appendix A) on page 7. While EPA notes on the slide deck "Deliberative – do not cite or quote" it is the most descriptive of the available information so for the purpose of providing comments, it is a necessary resource. The inconsistencies within the slide deck and between the other documents point to a rush to meet timeframes that are not practical when writing a program for such a diverse industry.

Protocol Specific Comments:

Protocol 4 (Compressor Blowdowns):

Unlike other protocols which include phrasing about economic viability as a consideration for determining the best compliance option, this protocol simply lists four options in hierarchical order. There can be a significant difference between what technically can be achieved in the field and what can "economically" be achieved. Economic considerations can include installation costs and time needed for installation, as well as reliability and on-going maintenance of the new equipment that was installed to meet a protocol. As currently written, the protocol would require the owner of a facility to justify why option 1, or 2, or 3 was not used without being able to consider economic viability and reliability.

Additional language should be added to the protocol to include economic viability and system reliability when considering the listed protocol hierarchy.

Protocol 5 (Compressor Starts):

The economic viability and system reliability comments from Protocol 4 are also applicable to this protocol. In addition, replacing gas starters with air, nitrogen or electric starters can add time to each compressor start as well as be a risk to system reliability if there is an electric outage.

Protocol 6 (Equipment Fugitives Above Ground):

The Appendix A document identifies an existing rule from the Colorado Air Quality Control Commission as the basis for including this protocol for Equipment Fugitives Above Ground. Appendix A further specifies that the protocol is derived from Section XVII.F.3 – F.7 of Colorado Regulation 7. The referenced section in the Colorado regulation is specific to well production facilities and natural gas compressor stations yet Protocol 6 in the Gold Program is listed as a requirement across all nine industry segments. The Colorado program is very focused and limited in scope while Protocol 6 appears to be very open ended. Appendix A does not indicate that the leak repair and inspection frequency is limited to compressors, which would lead Vectren to assume the protocol applies equally to any equipment that is part of the nine industry segments. Applying requirements that were written for a limited set of equipment to an entire industry is impractical.

The information presented in the June 18, 2014 EPA Webinar slide deck does not aid in our understanding of the requirement and adds additional uncertainty by including hydrocarbon concentration limits and leak repair definitions that appear to be far below levels allowed under current PHSMA regulations. This may impact our leak management practices to levels well above current code requirements and increase costs. On a small system, this impact may be negligible, but on our facilities which range in size from 3100 to 12,500 miles of distribution pipe, these added costs and man-hours could be significant. Finally, a ppm based reading for determining leak repair does not accurately address in- field realities. The same leak could yield very different readings if it occurs on a calm versus windy day. Similarly, a small pinhole leak on a high pressure system could show a higher ppm reading than a larger leak on a low pressure system.

Our ability to comment further is limited since the Appendix B document is still not available and for this protocol, the description in Appendix A specifically states "Use Appendix B of this document for the definition of leak and inspection frequency..."

At minimum, Vectren recommends limiting the scope of this protocol to compressors and well production facilities as originally identified in Colorado Rule 7.

Protocol 7 (Flares):

The blanket requirement to use a continuous ignition system for flares implies that all flares are designed in the same manner. In some situations, a flare may have one or more continuously burning pilot flames, some only ignite pilot flames in preparation for use, and others may use an electronic ignition system. Pilots can be blown out from wind or gas leakage, so the use of a continuous ignition source would also require a flame detection device to ensure the pilot is always lit. Unlike some of the other protocols that list a hierarchical approach for preferred methods of implementation, this protocol lists a single requirement that may not be operationally available or the most cost effective method in all situations for achieving methane reductions.

Additional options such as those listed above (ie. electronic ignition) should also be included as acceptable measures to meet the requirements of Protocol 7.

Protocol 8 (Gas-Driven Pneumatics):

Instrument air or nitrogen driven pneumatic devices have not been shown to be economical in many of our distribution regulator stations. As described earlier, Vectren's three facilities have 620 to 2309 regulator stations, all of which would have to simultaneously comply with this requirement within each facility. This is impractical and where low-bleed pneumatics are already installed, the change does not yield significant reductions in methane releases. The use of electric driven devices can cause logistical problems due to National Electric Code (NEC) specifications for distance between electric devices and escaping gas. In addition, if a company switches critical valves to electric it could cause a gas reliability problem if the system loses electric power.

Vectren recommends limiting this protocol requirement to "high-bleed" pneumatics and allow the continued use of low-bleed pneumatics.

Protocol 9 (Glycol Dehydrators):

It is unclear how maintaining a glycol circulation rate at 110% would result in reduced emissions. It would appear that this would actually decrease efficiency of the unit due to retention time for the fluid. If that is true, it may become necessary to add more units which would defeat the purpose of this protocol by adding a second emission source. EPA should provide more detail and explanation to further clarify this protocol.

Protocol 12 (Pipeline Venting and Blowdowns):

We agree that emergency blowdown situations must be excluded from the protocol. However, additional methods of compliance should be added.

Vectren recommends incorporating additional technologies and best management practices including, but not limited to:

- Using portable regulator or bypass valve to transfer natural gas into a low pressure system
- Using portable compressor to reduce pressure prior to venting
- Using hot tapping, squeezing and flaring

It should be noted that the listed technologies are not equally available across all industry segments. An option that may be available for a distribution system may be entirely infeasible for a storage field location which is much more remotely located.

Protocol 13 (Pipeline Inspection and Repair):

An annual leak survey on a Transmission system is already required under PHMSA. An annual leak survey for Distribution systems may be cost prohibitive due to the amount of pipe (for Vectren > 21,000 miles). Transmission lines are also generally located in large right of ways which more readily allow for aerial inspection compared to distribution lines that are typically located in population dense areas which require on the ground inspection. As noted earlier, the applicability of this protocol across the industry segments is inconsistent within EPA documents so it is not clear whether Distribution lines are included in this protocol.

Protocol 14 (Pressure Relief Valves – System Upsets):

Soft-seat PRVs are positive shut-off devices and leakage does not occur in the closed position.

Vectren recommends limiting this requirement to Hard-Seat Pressure Relief Valves.

Protocol 15 (Reciprocating Compressors Rod Packing):

There is insufficient detail in the posted information to determine if this protocol is feasible. On the surface, all three options have limitations due to cost, time, or the requirement for additional equipment. Again, Vectren understands that EPA's intent is to develop "stretch" goals, but if the goal of the protocol is virtually unattainable, then the entire program becomes infeasible since ALL protocols must be implemented to qualifty for the Gold program.

Protocol 17 (Cast Iron Distribution Pipeline and Unprotected Steel Pipeline):

The requirement to replace 10% of subject pipe per year is a non-starter for most companies. The ability to meet this requirement varies by utility size, location of remaining pipe and general age of the distribution system. While overall Vectren's current rate of replacement is at or near 10% per year, the rate within a specific facility (SIEGCO, IGC, or VEDO) may fluctuate based on specific project replacements and external factors such as review and approval of program elements by state utility regulators. Additionally, as large replacements projects are completed, smaller projects remain which slows down the overall rate of replacement. Vectren is aware that the American Gas Association (AGA) is providing significant comments and recommended language for alternate replacement rates based on system size. The requirement to perform additional surveys on pipe that is already subject to an industry wide replacement program is not an efficient use of resources and money.

Vectren recommends removing the requirement for both the pressure drop survey and annual leak survey. Additionally, we support the alternate Tiered approach that AGA is requesting through its comments.

Conclusion:

In conclusion, Vectren encourages EPA to seek additional stakeholder feedback on the proposed Natural Gas STAR Gold Program. We feel the timeline is being rushed as evidenced by the failure to publically release the essential Technical Support Document prior to the end of the comment period. There are aspects of the proposed rule that are not explained or defined

enough to provide comprehensive comments. In other cases, technologies or best practices that are designed for a specific situation are inaccurately or inconsistently assigned across multiple industry sectors. If protocols are established that they are too onerous, impractical or not cost effective to implement, it will discourage widespread participation in the voluntary program.

In addition to the above comments which are specific to Vectren's facilities, we are also members of and support the comments submitted by the American Gas Association (AGA). Thank you for the opportunity to comment on the proposed rulemaking. If you have any questions on the issue's raised in Vectren's comments, you may contact the undersigned at 812-491-4666 or lmessinger@vectren.com.

Sincerely,

Lisa C. Messinger

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